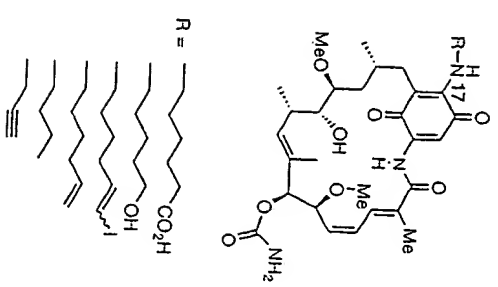
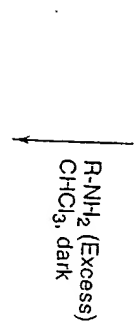
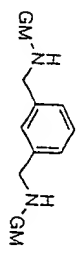


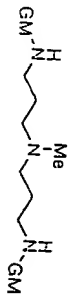
FIG. 1



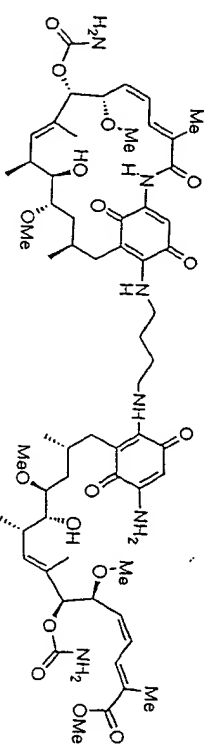
Aryl linkers



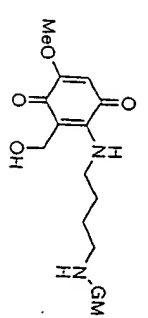
N-methylamino-linker



Geldanamycin Four Carbon
Dimer-Semi-Ansa-Ring Cleaved

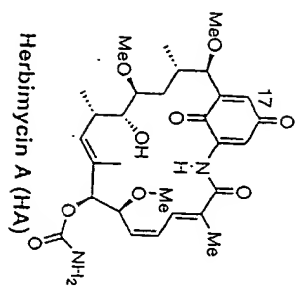
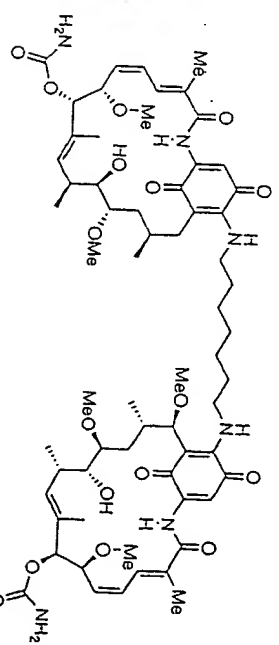


GM-Quinone



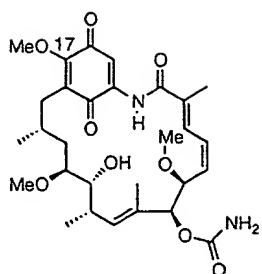
GM

1) $H_2N(CH_2)_7NH_2$, $CHCl_3$
2) HA, $CHCl_3$, Heat, 2 hrs

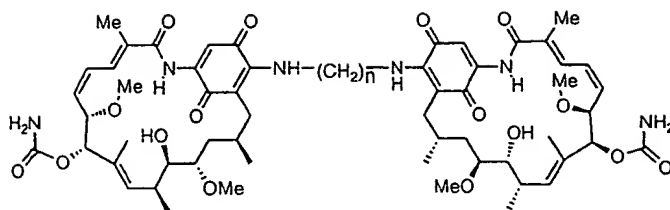


Geldanamycin-Herbimycin A Heterodimer

Chemical structures of Geldanamycin (GM) and Herbimycin A (HA) are shown.



Geldanamycin (GM,O)



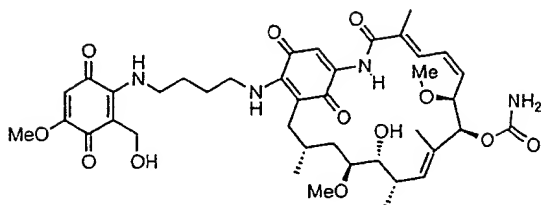
GM dimers (GMD, $\text{O} \text{---} \text{O}$)

$n = 4$: GMD-4C, $\text{O} \text{---} \text{O} \text{---} 4$

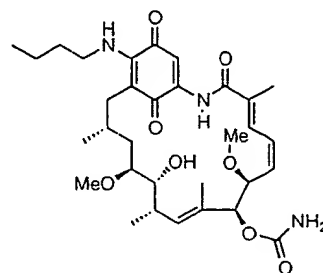
$n = 7$: GMD-7C, $\text{O} \text{---} \text{O} \text{---} 7$

$n = 9$: GMD-9C, $\text{O} \text{---} \text{O} \text{---} 9$

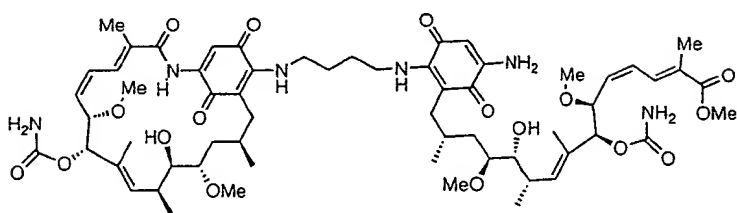
$n = 12$: GMD-12C, $\text{O} \text{---} \text{O} \text{---} 12$



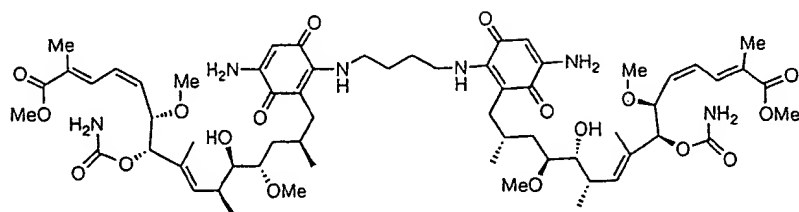
GM-Quinone, $\text{O} \text{---} 4 \square$



GM-linker, $\text{O} \text{---} 4$



GMD- α , $\text{O} \text{---} 4 \text{---}$



GMD- $\alpha\alpha$, $\text{---} 4 \text{---}$

Fig. 2